THE CLAIMS

1. (Previously Amended) Apparatus comprising:

a conveyor;

a weighing system that is capable of continually sensing load against the conveyor;

a calibration system for the weighing system that is capable of selectively applying a reference load to the weighing system without interrupting the ability of the weighing system to sense load against the conveyor; and

a comparator coupled to the weighing system to compare a continually sensed load from the weighing system with the continually sensed load combined with a reference load from the calibration system.

2. (Original) Apparatus of claim 1, the weighing system comprising:

a pivoted scale engaging the conveyor; and

a sensor capable of producing load stimulus in response to displacement of the pivoted scale by load applied against the conveyor.

3. (Original) Apparatus of claim 2, the calibration system comprising:

a reference load capable of being displaced; and

the sensor capable of producing test load stimulus in response to displacement of the pivoted scale by load applied against the conveyor and displacement of the reference load.

4. (Original) Apparatus of claim 3, wherein the reference load is supported by a pivoted test beam.

5. (Original) Apparatus of claim 4, wherein the pivoted test beam is capable of pivoting between a first position and a second position displacing the reference load.

6. (Original) Apparatus of claim 5, further comprising an engine associated with the pivoted test beam and movable between a first condition corresponding to the first position of the test beam and a second condition corresponding to the second position of the test beam.

7. (Currently Amended) Apparatus of claim 3, further comprising:

storage maintaining load stimulus data from the sensor commensurate with load applied to the conveyor and a test load stimulus data from the sensor commensurate with a combination of load applied to the conveyor and displacement of the reference load; and

a controller including the comparator, comparing the load stimulus data to the test load stimulus data and adjusting the weighing system if the comparison of the load stimulus data and the test load stimulus data is unacceptable.

8. (Currently Amended) In a conveyor continuously moving material, the material applying load to the conveyor, apparatus comprising:

a weighing system that is capable of continually sensing load against the conveyor, the weighing system including a pivoted scale engaging the conveyor, and a sensor capable of producing load stimulus in response to displacement of the pivoted scale by load applied against the conveyor; and

a calibration system for the weighing system that is capable of applying a reference load to the weighing system without interrupting the movement of material or the ability of the weighing system to sense load against the conveyor, the calibration system including a reference load capable of being displaced, the reference load supported by a pivoted test beam wherein the pivoted test beam is pivotable between a first position and a second position displacing the reference load, and the sensor capable of producing test load stimulus in response to displacement of the pivoted scale by load applied against the conveyor and displacement of the reference load.

9. (Canceled)

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10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Currently Amended) Apparatus of claim ~~12~~ 8,
further comprising an engine associated with the pivoted
test beam and movable between a first condition
corresponding to the first position of the test beam and a
second condition corresponding to the second position of the
test beam.

14. (Currently Amended) Apparatus of claim ~~10~~ 8,
further comprising:

storage maintaining load stimulus data from the sensor
commensurate with load applied to the conveyor and a test
load stimulus data from the sensor commensurate with a

combination of load applied to the conveyor and displacement of the reference load; and

a controller capable of comparing the load stimulus data to the test load stimulus data and adjusting the weighing system if the comparison of the load stimulus data and the test load stimulus data is unacceptable.

15. (Currently Amended) Apparatus comprising:

a conveyor having an upper run;

a weighing system comprising a load sensor and a scale displaced by the upper run of the conveyor so as to act on the load sensor; and

a reference load capable of being displaced so as to act on the load sensor concurrently with the upper run of the conveyor, the reference load is supported by a pivoted test beam underlying the upper run of the conveyor.

16. (Canceled)

17. (Currently Amended) Apparatus of claim ~~16~~ 15, wherein the pivoted test beam is movable between a first position and a second position displacing the reference load.

18. (Original) Apparatus of claim 17, further comprising an engine associated with the pivoted test beam and movable between a first condition corresponding to the

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first position of the test beam and a second condition corresponding to the second position of the test beam.

19. (Original) Apparatus of claim 15, further comprising:

storage maintaining load stimulus data from the load sensor commensurate with load applied to the conveyor and a test load stimulus data from the load sensor commensurate with a combination of load applied to the conveyor and displacement of the reference load; and

a controller capable of comparing the load stimulus data to the test load stimulus data and adjusting the weighing system if the comparison of the load stimulus data and the test load stimulus data is unacceptable.

20. (Original) In a conveyor and a weighing system that is capable of continually sensing load against the conveyor and generating load stimulus commensurate with the load against the conveyor, a method comprising steps of:

applying a reference load to the weighing system;

generating test load stimulus commensurate with a combination of the load against the conveyor and the reference load against the weighing system;

comparing the test load stimulus with the load stimulus; and

adjusting the weighing system if the comparison of the load stimulus and the test load stimulus is unacceptable.